METHOD OF TRANSMITTING AND RECEIVING ELECTRONIC MAIL AND COMMUNICATION TERMINAL

Background of the Invention

5 ## 1. Field of the Invention

The present invention relates to a method of transmitting and receiving an electronic mail. More particularly, the present invention relates to a method of transmitting and receiving an electronic

10 mail which a transmission person uses when wanting to make open the electronic mail on an appointed day.

2. Description of the Related Art

A transmitting person of an electronic mail can transmit the electronic mail at a time suitable for

15 the transmitting person. A receiving person of an electronic mail can receive the electronic mail at any time, and can know its content by opening the electronic mail at a suitable time. If the receiving person opens the electronic mail on a day earlier than

20 the appointed day, the receiving person may sometimes forget the content of the electronic mail on the appointed day. Moreover, the transmitting person may desire that the electronic mail will be opened on the appointed day, such as a congratulation mail for a

25 birthday.

Conventionally, when wanting to have read the electronic mail on the appointed day, the transmitting

person transmits the electronic mail on that day.
However, such a transmitting method imposes a burden
on the transmitting person.   Even if the electronic
mail is transmitted with an aim at that day, if a

5 transmission condition at that time is accidentally
poor, the electronic mail may not be sent to the
receiving person.   Moreover, even if the electronic
mail can be transmitted on the appointed day, if the
receiving person is busy, there may be a case that the

10 electronic mail can not be immediately opened.

Such a communication terminal is well known
which has a scheduler function of registering the
various schedules in relation to a user as schedule
data while they are correlated to the date and hour

15 fixed for an exposition (the scheduled date and hour),
the site of the exposition and the like, and reading
out the schedule data as necessary of the user or at a
time of an arrival of the schedule date and hour, and
then displaying the schedule data for a check.   In a

20 communication terminal disclosed in Japanese Laid Open
Patent Application (JP-A-Heisei, 11-341561), the
schedule data read out from a self-scheduler is
converted into mail data, and the mail data is
transmitted to a destination terminal.   Moreover, when

25 mail data is received from a destination terminal, it
is identified whether or not the mail data is schedule
data.   If the mail data is the schedule data, the mail

data is converted into the schedule data, and the schedule data is registered in the scheduler.

In this communication terminal, the user can set and check the scheduler. Thus, an automatically registered message can be also checked prior to the date and hour of the schedule registration.

In an electronic mail apparatus disclosed in Japanese Laid Open Patent Application (JP-A-Heisei, 11-203215), when an electronic mail to which an appointed date and hour is appended is received and a current date and hour reaches the appointed date and hour, the electronic mail is automatically opened and displayed. In this electronic mail apparatus, a burden on a transmitting person can be reduced, and the content of the electronic mail can be surely reported to a receiving person. However, the electronic mail can be opened prior to the appointed day.

In a electronic mail system disclosed in Japanese Laid Open Patent Application (JP-A-Heisei, 11-168495), when an open period is appended to an electronic mail, and then an open of the electronic mail is required to a user on a receiving side, a communication terminal on the receiving side opens the electronic mail if it is in the open period, and deletes the electronic mail if it is not in the open period, and reports its fact to a communication

terminal on a transmitting side, and the communication
terminal on the transmitting side again transmits the
electronic mail. In this electronic mail system, the
electronic mail can be opened only when the open is

5 requested in the open period. So, the terminal on the
receiving side can make open the electronic mail
surely in the open period. However, each time the
receiving person requests the open in a period except
the open period, the terminal on the transmitting side

10 must transmit the electronic mail any number of times.

As a related art, Japanese Laid Open Patent
Application (JP-A-Heisei, 9-8842) discloses
"Electronic Mail System". In this electronic mail
system, when an operation such as an open, a

15 cancellation of the open, a deletion, a storage or the
like of a message is performed on a first
communication terminal apparatus, a controller of a
communication terminal apparatus changes a state of
the message stored in a memory, and transmits a

20 control message to a server unit. A controller of the
server unit transfers the transferred control message
to all other communication terminal apparatuses.
Controllers of all the other communication terminal
apparatuses update the states of the messages

25 corresponding to identification information
represented by the transferred control message. Thus,
the states of the messages can be synchronized in all

the communication terminal apparatuses.

Japanese Laid Open Patent Application (JP-A-Heisei, 9-237254) discloses "Electronic Apparatus". In this electronic apparatus, under such a condition that mail data received through a communication unit is stored in a reception data register within RAM and displayed on a touch panel, when a character string indicative of a date with regard to the mail included in the mail data is specified by a pen touch, it is judged whether or not the temporal element, such as "Today", "Tomorrow", "Day Of Next Week", "Day Of Next Month" or the like, exists in the character string. In a case of the existence of the temporal element, a date with regard to the mail is specified from the temporal element based on a current date obtained on the basis of a clock signal form a clock unit, and directly captured and displayed as schedule data of a corresponding date after an actuation of a schedule mode.

Japanese Laid Open Patent Application (JP-A-Heisei, 10-31635) discloses "Portable Electronic Mail Terminal". In this portable electronic mail terminal, a radio communication unit receives a mail. A mail command decoder decodes the content of the mail, and then determines the display content. Its content is displayed on a display. When a user carries out an input operation in response to the display, in

accordance with the input, the mail command decoder,
if its input instructs a schedule memo call, indicates
a date and an hour to a schedule manager, and
instructs such that a schedule corresponding to the
5 indication is displayed. Thus, the schedule of the
date indicated in the mail is displayed on the display.
Hence, the user operation can be simplified when the
electronic mail is transmitted and received.

Japanese Laid Open Patent Application (JP-A-
10 Heisei, 10-269283) discloses "Information Managing
Apparatus, Information Managing Method And Storage
Media For Information Management". This information
managing apparatus is provided with a communicating
unit, an automatic reply mail database, a mail
15 analyzer and a mail replying unit. The communicating
unit transmits and receives an electronic mail
including sender information and title information
representing a schedule object. The automatic reply
mail database stores reply mail information including
20 a predetermined pattern. The mail analyzer analyzes
the title information of the reception mail received
by the communicating unit and judges whether the
content of the reception mail is a schedule report or
another report. The mail replying unit, when the mail
25 analyzer judges as the schedule report, adds the
sender information of the reception mail extracted
from the reception mail and intention information of a

receiving person reflecting a schedule item of pre-
stored schedule data, to the reply mail information of
the predetermined pattern stored in the automatic
reply mail database, and then generates a reply mail.

5 The reply mail generated by this reply mail generator
is automatically replied to the sender from the
communicating unit.

Moreover, Japanese Laid Open Patent Application
(JP-A-Heisei, 11-203217) discloses "Electronic Mail

10 System, Method Of Transmitting And Receiving
Electronic Mail And Storage Media". In this
electronic mail system, when an electronic mail to
which song data composed of MIDI data is appended is
transmitted from a transmission terminal, a server

15 computer stores this data in a memory, and reports a
fact of a mail incoming to a reception terminal. The
reception terminal, when receiving it, accesses to the
server computer to read out a reception mail. Then,
when the data is received from the server computer,

20 character data and picture data among the reception
data are displayed on a display together with a
reproduction button. The MIDI data among the
reception data is automatically reproduced and sounded.

25   **Summary of the Invention**
Therefore, an object of the present invention is
to provide a method of transmitting and receiving an

electronic mail, in which a transmitting person can specify an open period of an electronic mail.

Another object of the present invention is to provide a method of transmitting and receiving an electronic mail, in which, even if a current time of a terminal on a receiving side is reset, a transmitting person can specify an open period of an electronic mail.

Still another object of the present invention is to provide a method of transmitting and receiving an electronic mail, in which a transmitting person can specify an open period of an electronic mail, and an erroneously transmitted electronic mail can be deleted from a terminal on a receiving side, in accordance with an indication of a terminal on a transmitting side.

Means for achieving the object will be described below using reference numerals and symbols used in "Embodiments of the invention". These reference numerals and symbols are added so that relation between the description of "Scope of the Patent to be Claimed" and the description of "Embodiments of the invention" is made clear. However, it is never permitted to use the reference numerals and symbols for the interpretation of technical scopes of the inventions described in "Scope of the Patent to be Claimed" and the description of "Embodiments of the

invention".

A method of transmitting and receiving an electronic mail, according to a first aspect of the present invention, includes a generating step and a

5 decoding step. In the generating step, an electronic mail to which an open date and hour is added is generated in a transmitting side communication terminal (Steps A1 to A13). In the decoding step, the electronic mail in a receiving side communication

10 terminal after current date and hour reach the open date and hour (Steps B6 to B12). According to this construction, because the electronic mail can not be decoded prior to the open date and hour specified by a transmitting person, a receiving person can not open

15 the electronic mail. Such encryption can protect the receiving person from directly reading the electronic mail even if a communication terminal (10) receiving the electronic mail is a personal computer.

Moreover, the method of transmitting and

20 receiving the electronic mail according to the present invention may further include a preventing step and a requesting step. In the preventing step, in the receiving side communication terminal (10) receiving the electronic mail, the electronic mail is prevented

25 from being decoded, until the current date and hour reach the open date and hour (Step B3). In the requesting step, when the receiving side communication

terminal (10) does not have the current date and hour, it is required the receiving side communication terminal (10) to set the current date and hour. By this structure, it is possible to protect the

5 erroneous operation caused by the non-recognition of the current date and hour, and also possible to surely prevent the electronic mail from being opened.

Moreover, the method of transmitting and receiving the electronic mail according to the present

10 invention may further include a changing step in which when the current date and hour is changed to another current date and hour, the open date and hour based on the current date and hour and the other current date and hour is changed (Steps B9 to B10). Such change of

15 the open date and hour disables the receiving person from opening the electronic mail by changing the current date and hour. It is desirable that a relation between the current date and hour and the open date and hour prior to the change is equivalent

20 to a relation between another current date and hour and the open date and hour after the change.

Moreover, in the method of transmitting and receiving the electronic mail according to the present invention may include a requesting step in which the

25 receiving side communication terminal (10) request to open the electronic mail when the current date and hour reach the open date and hour. It reports the

incoming of the open date and hour to the person
receiving the electronic mail, and thereby protects
the receiving person from forgetting to open the
electronic mail. If the communication terminal (10)

5 has a scheduler function, the open date and hour is
correlated to schedule date and hour, and the open of
the electronic mail is correlated to schedule data.

     Furthermore, the method of transmitting and
receiving the electronic mail according to the present

10 invention may further include the steps of: adding a
mail deletion key code to the electronic mail;
recording the received electronic mail together with
the mail deletion key code; and deleting a plurality
of electronic mails to which the same mail deletion

15 key code is added. The transmitting person can remove
the data of the electronic mail recorded in the
receiving side communication terminal (10). As for
two electronic mails to which the same mail deletion
key code is added, both are deleted, or only the

20 firstly received electronic mail is deleted.

     A communication terminal according to a second
aspect of the present invention includes a receiver
(1) and a controller (2). The receiver (1) receives
an electronic mail to which an open date and hour is

25 added. The controller (2) decodes and opens the
electronic mail received by the receiver (10), after
current date and hour reach said open date and hour.

The electronic mail can not be decoded prior to the
open date and hour specified by the transmitting
person, and the receiving person can not open the
electronic mail.   The communication terminal according
5 to the present invention includes a portable wireless
communication apparatus such as a portable telephone
and the like, a personal computer and the like, as
examples.

In the controller (2), when the current time is
10 set by the user, and the current date and hour is
changed to another current date and hour, the
controller (2) changes the open date and hour.   The
relation between the current date and hour and the
open date and hour prior to the change is equivalent
15 to the relation between another current date and hour
and the open date and hour after the change.   Such
change of the open date and hour disables the
receiving person from opening the electronic mail by
changing the current date and hour.

20

Brief Description of the Drawings

Fig. 1 is a block diagram showing a
communication terminal for transmitting and receiving
an electronic mail according to an embodiment of the
25 present invention;

Figs. 2A and 2B are flowcharts showing an
embodiment of a method of transmitting an electronic

mail, according to the present invention; and

Figs. 3A to 3C are flowcharts showing an embodiment of a method of receiving an electronic mail, according to the present invention.

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Description of the Preferred Embodiments

A method of transmitting and receiving an electronic mail, according to the present invention will be described below with reference to the attached

10 drawings. Fig. 1 illustrates a communication terminal for transmitting and receiving an electronic mail in which an open date and hour is specified (hereinafter, referred to as "open date and hour specification electronic mail". For example, a portable wireless

15 communication apparatus such as a portable telephone and the like, a personal computer and the like are used as the communication terminal 10. The communication terminal 10 is provided with a communication controller 1, a computer unit 2 and a

20 memory unit 3. The communication controller 1 is connected to a communication line network (not shown) and connected to the computer unit 2. The computer unit 2 is connected to the memory unit 3.

The memory unit 3 records therein document data

25 4, melody data 5, picture data 6, open date and hour management data 7 and current date and hour data 8. The electronic mail is composed of the document data 4,

the melody data 5 and/or the picture data 6. An open
date and hour and data to inhibit a reading operation
are further added to the electronic mail. The open
date and hour indicates the date and hour when the
5 communication terminal 10 receiving the open date and
hour specification electronic mail can open the
electronic mail. The open date and hour management
data 7 is stored in a table constituted by a
registration number of the open date and hour
10 specification electronic mail received by the
communication terminal 10 and the open date and hour
appended to the open date and hour specification
electronic mail. The registration number corresponds
to the received open date and hour specification
15 electronic mail. The current date and hour data 8
indicates a current date and hour.

The communication controller 1 receives an
electronic mail through the communication line network,
and outputs the received electronic mail to the
20 computer unit 2. The communication controller 1
transmits an electronic mail generated by the computer
unit 2, through the communication line network to
another communication terminal.

The computer unit 2 includes a program 11, a key
25 input unit 12 and a display output unit 13, and also
includes a scheduler (not shown). The computer unit 2
executes the program 11 on the basis of an output of

the key input unit 12. The key input unit 12 accepts
a key input from a user. The display output unit 13
displays a message, a document based on the document
data 4 or a picture based on the picture data 6 each
5 which is indicated by the program 11, and plays a
melody based on the melody data 5.

The scheduler registers schedule data correlated
to a schedule date and hour. The schedule data is
read out, as necessary of the user, or at a time of an
10 arrival of the schedule date and hour, and then
displayed on the display output unit 13. The schedule
data is composed of the document data 4, the melody
data 5 or the picture data 6.

The program 11 includes a mail transmitting
15 process 14, a document generating process 15, a melody
generating process 16, a picture generating process 17,
a transmission mail open specification registering
process 18, a mail receiving process 19, a document
displaying process 20, a melody playing process 21, a
20 picture displaying process 22, a schedule managing
process 23 and a current time managing process 24.

The document generating process 15 generates the
document data 4 on the basis of the output of the key
input unit 12. The melody generating process 16
25 generates the melody data on the basis of the output
of the key input unit 12. The picture generating
process 17 generates the picture data 6 on the basis

of the output of the key input unit 12.   The
transmission mail open specification registering
process 18 adds the open date and hour and the data to
inhibit the reading operation until arriving the open
5   date and hour, to the generated electronic mail.   The
mail transmitting process 14 instructs transmission of
the generated electronic mail to the communication
controller 1.

     The mail receiving process 19 receives the
10   electronic mail received by the communication
controller 1, and records the electronic mail in the
memory unit 3.   The document displaying process 20
displays the document data of the received electronic
mail on the display output unit 13.   The melody
15   playing process 21 outputs the melody data of the
electronic mail to the display output unit 13.   The
picture data displaying process 22 displays the
picture data 6 of the electronic mail on the display
output unit 13.   The schedule managing process 23
20   displays a message of "Please, Set Current Date And
Hour" on the display output unit 13, before
registering the received electronic mail in the memory
unit 3, if the current date and hour is not set for
the communication terminal 10, when receiving the open
25   date and hour specification electronic mail, to
thereby prompt the user to set the current date and
hour.

The current time managing process 24 reports a
current date and hour to the schedule managing process
23 for each update of a current date and hour. Then,
registered schedule data is displayed or played if the
5 current date and hour agrees with a schedule date and
hour. At a time of an arrival of the open date and
hour of the open date and hour specification
electronic mail, the current time managing process 24
deletes a specification date and hour management data
10 7 corresponding to the mail. The current time
managing process 24, if the user changes a current
date and hour, further calculates a relative time
between an open date and hour and the current date and
hour, adds the relative time to the changed current
15 date and hour, and re-registers the addition result as
the open date and hour.

Figs. 2A and 2B show the generating method and
the transmitting method of an electronic mail in which
an open date and hour is specified. It is checked
20 whether or not an instruction of generating an open
date and hour specification electronic mail is
inputted by a user (Step A1). When it is judged that
the instruction is inputted, the user inputs an open
date and hour (Step A2). Then, it is checked whether
25 or not a document input is instructed from the user
(Step A3). In this Step A3, if it is judged that the
document input is instructed (Step A3; YES), the user

inputs document data through the key input unit 12,
and the document generating process 15 generates the
document data 4 (Step A4).   The document data 4 is
recorded in the memory unit 3 (Step A5).   Also, pre-
recorded document data 4 is registered as an
electronic mail.

In above Step A3, if it is judged that the
document input is not instructed (Step A3; NO), it is
checked whether or not a picture input is instructed
from the user (Step A6).   In this Step A6, if it is
judged that the picture input is instructed (Step A6;
YES), the user inputs picture data through the key
input unit 12, and the picture data generating process
16 generates the picture data 5 (Step A7).   Or, it is
selected from pre-recorded picture data 5.   Its
picture data 5 is recorded in the memory unit 3 (Step
A8).   In above Step A6, if it is judged that the
picture input is not instructed (Step A6; NO), it is
checked whether or not a melody input is instructed
from the user (Step A9).   In this Step A9, if it is
judged that the melody input is instructed (Step A9;
YES), the user inputs the melody data through the key
input unit 12, and the melody data generating process
17 generates the melody data 6 (Step A10).   Or, it is
selected from pre-recorded melody data 6.   Its melody
data 6 is recorded in the memory unit 3 (Step A11).

Next, it is checked whether or not an input of

the electronic mail data is completed (Step A12). In
this Step A12, if it is judged that the input of the
electronic mail data is not completed (Step A12; NO),
the operation at the step A3 is again executed to
generate the electronic mail. On the other hand, in
above Step A12, if it is judged that the input of the
electronic mail data is completed (Step A12; YES), the
transmission mail open specification registering
process 18 encrypts the electronic mail data, and it
is edited to data having a format of the open date and
hour specification electronic mail (Step A13).

Then, the open date and hour specification
electronic mail after the completion of the generation
is once reproduced as a test (Step A14). At this time,
the user can check the reproduced electronic mail.
Next, it is checked whether or not the user desires an
addition or modification of the reproduced electronic
mail (Step A15). In this Step A15, if it is judged
that the user desires to add or modify the electronic
mail (Step A15; YES), the operation at the step A3 is
again executed to generate the electronic mail. If it
is judged that the user does not desire to add or
modify the electronic mail (Step A15; NO), the user
inputs a network address of a transmission destination
of the open date and hour specification electronic
mail (Step A16). The generated open date and hour
specification electronic mail is sent to a destination

indicated by the network address (Step A17).

Figs. 3A to 3C show the method of receiving an
open date and hour specification electronic mail. The
communication controller 1 receives an electronic mail
5   from a communication line network (Step B1). Then, it
is checked whether or not the received electronic mail
is the open date and hour specification electronic
mail (Step B2). If it is judged that the received
electronic mail is not the open date and hour
10   specification electronic mail (Step B2; NO), this
receiving operation is ended. On the other hand, if
it is judged that the received electronic mail is the
open date and hour specification electronic mail (Step
B2; YES), it is checked whether or not a current date
15   and hour is set for the communication terminal 10
(Step B3).

When it is so judged that the current date and
hour is not set for the communication terminal 10
(Step B3; NO), a message of "Please, Set Current Date
20   And Hour" is displayed on the display output unit 13
for requiring the user to set the current date and
hour. In response to this message, The user sets the
current date and hour (Step B5).

An open date and hour and a name of a
25   transmitting person of the received open date and hour
specification electronic mail are displayed on the
display output unit 13 (Step B5). Then, the context

between the open date and hour and the current date
and hour is checked (Step B6). If it is judged that
the open date and hour is located before the current
date and hour (Step B6; NO), the sequence is jumped to

5 Step B12. On the other hand, if it is judged that the
open date and hour is located after the current date
and hour (Step B6; YES), a registration number is
given to the open date and hour specification
electronic mail, and the numbered open date and hour

10 specification electronic mail is recorded in the
memory unit 3 (Step B7). Also, the registration
number and the open date and hour are recorded as the
open date and hour management data 7 (Step B8).

      After the open date and hour specification

15 electronic mail is recorded, it is monitored and
checked whether or not the current date and hour is
changed by the user (Step B9). If it is judged that
the current date and hour is changed and set (Step B9;
YES), a relative time between the open date and hour

20 and the current date and hour prior to the change is
calculated to add the relative time to the current
date and hour after the change. Then, the addition
result is re-registered as the open date and hour
(Step B10). After that, the operation at the step B8

25 is again executed. If it is judged that the current
date and hour is not changed (Step B9; NO), it is
checked whether or not the open date and hour is

located after the current date and hour (Step B11).
In this Step B11, it is judged that the open date and
hour is not located after the current date and hour
(Step B11; NO), the operation at the step B9 is again
5   executed to monitor the change of the current date and
hour.

     If the open date and hour is located after the
current date and hour (Step B6; NO or Step B11; NO),
the data of the open date and hour specification
10 electronic mail is decoded to thereby become at an
openable state (Step B12).

     Then, it is checked whether or not a melody data
is included in the decoded open date and hour
specification electronic mail (Step B13). In this
15 Step B13, if it is judged that the melody data is not
included in the mail (Step B13; NO), the sequence is
jumped to Step B17. On the other hand, if it is
judged that the melody data is included in the mail
(Step B13; YES), it is checked whether or not the
20 melody data can be reproduced (Step B14). In this
step B14, it is judged that the melody data can be
reproduced (Step B14; YES), the melody data is played
by the display output unit 13 (Step B15). On the
other hand, if it is judged that the melody data can
25 not be played (Step B14; NO), an incoming tone of the
electronic mail set by the user is played (Step B16).

     Then, it is checked whether or not picture data

is included in the decoded data (Step B17). In this Step B17, if it is judged that the picture data is included in the decoded data (Step B17; YES), the picture data is displayed on the display output unit 13 (Step B18). If it is judged that the picture data is not included in the decoded data (Step B17; NO), this Step B18 is skipped. Then, it is checked whether or not document data is included in the decoded data (Step B19). In this Step B19, if it is judged that the document data is included in the decoded data (Step B19; YES), the document data is displayed on the display output unit 13 (Step B20). If it is judged that the document data is not included in the decoded data (Step B19; NO), this Step B20 is skipped.

Then, it is checked whether or not the stop of the play or the display of the electronic mail is indicated is monitored (Step B21). If it is judged that the stop is indicated (Step B21; YES), a message for prompting the user to indicate whether or not the data is stored is displayed (Step B22). Then, it is checked whether or not the indication to store the data of the electronic mail is performed (Step B23). In this Step B23, if it is judged that the indication to store the data of the electronic mail is not exist (Step B23; NO), the data of the electronic mail is deleted (Step B24). On the other hand, if it is judged that the indication to store the data of the

electronic mail from the user is exist (Step B23; YES),
the data of the electronic mail which is requested to
be stored is recorded in the memory unit 3 (Step B25).

Then, a reply check screen to check whether or
5   not a reply is transmitted to a mail transmission
source is displayed on the display output unit 13.   So,
it prompts the user to indicate whether or not the
reply is transmitted (Step B26).   Then, it is checked
whether or not a mail request is exist in the mail
10   transmission source (Step B27).   If it is judged that
the mail request is exist, and the user transmits the
reply to the mail transmission source (Step B27; YES),
the mail transmitting process 14 transmits a reply
mail to the mail transmission source (Step B28).

15   In the method of transmitting and receiving an
electronic mail according to the present invention,
the transmitting person of the electronic mail can
specify the period in which the receiving person of
the electronic mail can open the electronic mail.   As
20   a result, for example, if a message is transmitted
through the electronic mail between friends on a
memorial day such as a birthday or the like, the
electronic mail can be transmitted before several days
and its content can be concealed from a receiving
25   person until the specified date.   Moreover, since the
receiving person is anxious about the content of the
electronic mail, the receiving person can get the joy

of waiting for the open date and hour.

In one embodiment of the method of transmitting
and receiving an electronic mail according to the
present invention, the electronic mail data recorded
in the communication terminal on the receiving side
can be further removed by the intention of the user on
the transmitting side. The mail deletion key code
further belongs to the open date and hour
specification electronic mail. Only the transmitting
person can determine the mail deletion key code. The
open date and hour management data 7 is constituted by
the registration number corresponding to the open date
and hour specification electronic mail, the open date
and hour belonging to the open date and hour
specification electronic mail and the mail deletion
key code. If the same mail deletion key code exists
in the open date and hour management data 7, the data
of the electronic mail corresponding to the mail
deletion key code is deleted to accordingly delete the
open date and hour management data 7 corresponding to
the electronic mail.

The communication terminal on the transmitting
side adds the mail deletion key code to the open date
and hour specification electronic mail, and then
transmits the open date and hour specification
electronic mail. The communication terminal on the
receiving side records the mail deletion key code of

the received open date and hour specification
electronic mail together with the open date and hour
as the open date and hour management data 7. After
that, if the transmitting person desires to delete the
5   electronic mail recorded in the communication terminal
on the receiving side, the transmitting person
transmits the electronic mail to which the same mail
deletion key code is added, to the communication
terminal on the receiving side.

10   The communication terminal on the receiving side
retrieves the mail deletion key code of the received
electronic mail from the open date and hour management
data 7. If the same mail deletion key code exists in
the open date and hour management data 7, it deletes
15   the data of the electronic mail corresponding to the
mail deletion key code, and then deletes the open date
and hour management data 7 corresponding to the
electronic mail.

        The user on the transmitting side, if
20   erroneously transmitting the open date and hour
specification electronic mail to a non-intended
communication terminal, can remove the electronic mail
data recorded in the communication terminal on the
receiving side.

25   As described above, in the method of
transmitting and receiving an electronic mail
according to the present invention, the transmitting

person of the electronic mail can specify the period
in which the receiving person of the electronic mail
can open the electronic mail.